# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

| IN THE MATTER OF:   | )   |
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| Consolidated Papers, Inc<br>Kraft Division<br>950 Fourth Avenue North                           | ) ) NOTICE OF VIOLATION ) ) EPA-5-00-WI-5 |
| Wisconsin Rapids, Wisconsin   | )   |
| Proceedings Pursuant to<br>Section 113(a)(1) of the<br>Clean Air Act, 42 U.S.C.<br>§ 7413(a)(1) | )<br>)<br>)                               |

#### NOTICE OF VIOLATION

The Administrator of the United States Environmental Protection Agency ("U.S. EPA") is issuing this Notice of Violation ("NOV") to the State of Wisconsin and Consolidated Papers, Inc. - Kraft Division ("CPI") under Section 113(a)(1) of the Clean Air Act ("Act"), 42 U.S.C. §7413(a)(1). U.S. EPA finds that CPI has violated Part C of the Act, 40 C.F.R. § 52.21 and the Wisconsin State Implementation Plan (SIP) adopted under the Act, as follows:

## Statutory and Regulatory Background

- 1. Part C of the Act, 42 U.S.C. §§7470-7479, requires the Administrator to promulgate regulations to prevent the significant deterioration of air quality in areas designated as attainment or unclassifiable in accordance with Section 107(d) of the Act, 42 U.S.C. §§7407(d). In accordance with this, the Administrator promulgated regulations at 40 C.F.R. §51.166 setting forth State Implementation Plan ("SIP") approval requirements for the prevention of significant deterioration ("PSD") of air quality.
- 2. Section 161 of the Act, 42 U.S.C. §7471, and 40 C.F.R. §51.166(a)(1) require that the States submit SIPs containing emission limitations and other measures necessary to prevent the significant deterioration of air quality.
- 3. On June 19, 1978, U.S. EPA promulgated PSD regulations pursuant to Part C of the Act. (45 Federal Register 27561). U.S. EPA revised the PSD regulations on August 7,1980 (45 Federal Register 52676), codified at 40 C.F.R. §52.21 et seq.

- 4. Under Section 110(a) of the Act, 42 U.S.C. §7410(a), the Administrator determined the Wisconsin SIP did not satisfy the measures required to ensure the prevention of the significant deterioration of air quality. As a result, the Administrator disapproved the PSD portion of the Wisconsin SIP, 52 C.F.R. §52.2581(a).
- 5. On June 19, 1978, in accordance with Section 110(c) of the Act, 42 U.S.C. §7410(c) and 40 C.F.R. §52.21(a), the Administrator incorporated the provisions of 40 C.F.R. §52.21(b) through (w) [PSD regulations] as part of the federally approved Wisconsin SIP, 40 C.F.R. §52.2581(b).
- 6. On May 26, 1988, U.S. EPA delegated its responsibility for conducting "source review" under the PSD regulation to the State of Wisconsin. 40 C.F.R. §52.21(u). The effective date of the full delegation of authority to the State of Wisconsin was November 13, 1987. U.S. EPA, however, retained separate authority to enforce the Act and the implementing regulations with respect to PSD. 53 Fed. Reg. 18983.
- 7. On November 6, 1996, the Wisconsin DNR submitted a second request for approval of its revised PSD program.
- 8. On May 27, 1999, U.S. EPA approved the State of Wisconsin's PSD rules to be effective on June 28, 1999, at 40 C.F.R. \$52.2570(c)(98), 52.2581(d) and (e). 64 Fed. Reg. 28745-28748.
- 9. 40 C.F.R. §52.21(i)(1) and Section 165 of the Act prohibit construction of a major stationary source or a major modification without a permit issued under the PSD regulations in any area which has attained the National Ambient Air Quality Standards ("NAAQS").
- 10. A major stationary source includes any of the 28 designated industrial source categories listed under 40 C.F.R. \$52.21(b)(1)(i)(a), and which emits or has the potential to emit 100 tons per year ("tpy") of any pollutant subject to the regulation under the Act. The list of designated source categories includes kraft pulp mills.
- 11. 40 C.F.R. §52.21(b)(2)(i) defines "Major Modification" as any physical change or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

- 12. 40 C.F.R. §52.21(b)(3)(i) defines "Net Emissions Increase" as the amount by which the sum of the following exceeds zero: (a) any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and (b) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- 13. 40 C.F.R. §52.21(b)(3)(ii) states that an increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs.
- 14. 40 C.F.R. §52.21(b)(4) defines "Potential to Emit" ("PTE") as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.
- 15. 40 C.F.R. §52.21(b)(23)(i) defines "Significant" as in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

#### Pollutant and Emissions Rate

| Nitrogen oxides<br>Sulfur dioxides<br>Carbon monoxide<br>Ozone                              | 40 tpy<br>40 tpy<br>100 tpy<br>40 tpy of volatile organic<br>compounds                       |
|---|--|
| Hydrogen sulfide $(H_2S)$<br>Total reduced sulfur (including $H_2S$ )<br>Particulate matter | 10 tpy  10 tpy  25 tpy of particulate matter emissions; 15 tpy of PM <sub>10</sub> emissions |

- 16. 40 C.F.R. §52.21(i)(1) provides that no major stationary source or major modification shall begin actual construction without a permit which states that the major stationary source or modification would meet the requirements of 40 C.F.R. §52.21(j) through (r).
- 17. 40 C.F.R. §52.21(j) provides that for each pollutant subject to regulation under the Act for which a major modification would result in a significant net emissions increase at the source, the owner or operator of the major modification

- shall apply Best Available Control Technology ("BACT") to each proposed emissions unit at which the increase would occur as the result of physical changes and changes in the methods of operation of the unit.
- 18. 40 C.F.R. §52.21(k) provides that the owner or operator of a major modification shall show that the significant net emissions increase will not contribute to a violation of any National Ambient Air Quality Standards (NAAQS), and that the increase will not be in excess of any applicable maximum allowable increase over the baseline ambient air concentration.
- 19. 40 C.F.R. §52.21(m) provides that the owner or operator of a major modification shall conduct and submit as part of a permit application, an ambient air quality analysis for each air pollutant subject to regulation under the Act for which the major modification would result in a significant net emissions increase at the source.
- 20. 40 C.F.R. §52.21(n) provides that the owner or operator of a major modification shall submit all information necessary to perform any analysis or make any determination required under 40 C.F.R. §52.21.
- 21. 40 C.F.R. §52.21(o) provides that the owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification.
- 22. 40 C.F.R. §52.21(r) provides that any owner or operator of a source subject to PSD regulation who commences construction without applying for and receiving a permit to construct under PSD regulations shall be subject to an enforcement action.
- 23. 40 C.F.R. §52.23 provides, among other things, that failure to comply with any approved regulatory provision of a SIP or with any permit condition, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated into the State implementation plan, subjects the person or governmental entity so failing to comply, in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the Clean Air Act.

### Factual Background

- 24. CPI owns and operates a Kraft Pulp Mill in Wisconsin Rapids, Wood County, Wisconsin.
- 25. Wood County is an attainment area for particulate matter (PM), particulate matter less than 10 microns (PM<sub>10</sub>), sulfur dioxides (SO<sub>2</sub>), carbon monoxide (CO), and nitrogen oxides (NO<sub>x</sub>). 40 C.F.R. \$81.350.
- 26. Since at least 1980, CPI has been a major stationary source as defined at 40 C.F.R. §52.21(b)(1) because it is a kraft pulp mill, one of the 28 industrial source categories listed under 40 C.F.R. §52.21 and has a PTE of more than 100 tpy of PM, SO<sub>2</sub>, NO<sub>x</sub>, volatile organic compounds ("VOC"), and CO.
- 27. On April 14, 1999, U.S. EPA issued a Request for Information to CPI under Section 114 of the Act, 42 U.S.C. §7414.
- 28. On May 6, 1999, CPI submitted its responses to the Request for Information.
- 29. From May 18 through 20, 1999, five duly delegated representatives of EPA conducted an inspection of the CPI facility ("facility") and generated information necessary to assess compliance with the Act.
- 30. On May 28, 1999, CPI submitted information requested by EPA during the inspection.
- 31. On June 11, 1999, U.S. EPA issued another Request for Information under Section 114 of the Act, 42 U.S.C. §7414.
- 32. On July 6, 26, and 30, 1999, CPI submitted responsive information.
- 33. On July 29, 1999, U.S. EPA sent a letter to CPI, requesting clarification of some of CPI's responses to U.S. EPA's Requests for Information under Section 114 of the Act, 42 U.S.C. §7414.
- 34. On August 31, 1999, CPI submitted responsive clarifications to U.S. EPA's questions.
- 35. On August 13, 1999, U.S. EPA issued a Request for Information to CPI under Section 114 of the Act, 42 U.S.C. § 7414.

- 36. On August 24, 1999, CPI submitted responsive information.
- 37. On February 24, 2000, U.S. EPA issued a subsequent Request for Information to CPI under Section 114 of the Act, 42 U.S.C. § 7414.
- 38. On March 3, 2000, CPI submitted responsive information.

## First Expansion Project

- 39. In or about July 1983, CPI commenced a project to create separate pulp production lines for softwood and hardwood, by installing a separate softwood pressure screening system at the pulp mill.
- 40. In or about 1984, CPI commenced construction of a softwood digester K-2, hardwood stock washing, hardwood chlorination and cleaning, and chip reclaim systems. This project ("first expansion project") was intended to increase the overall pulp production capacity of the facility.
- 41. In or about 1985, CPI commenced operation of the softwood digester K-2, hardwood stock washing, hardwood chlorination and cleaning, and chip reclaim systems. These installations allowed for increased loading of black liquor solids ("BLS") through the recovery boilers.
- 42. In or about 1985, CPI commenced construction of the oxygen delignification stage in the hardwood bleach plant. In or about 1986, CPI commenced operation of the oxygen delignification stage in the hardwood bleach plant. This installation allowed for increased loading of black liquor solids ("BLS") through the recovery boilers.
- 43. All of the above activities were elements of an integrated project intended to increase the pulp production capacity of the facility. Therefore, all of these activities should have been reviewed together to determine whether a significant net emissions increase had occurred for pollutants regulated under the Act and be permitted accordingly.
- 44. As a result of the combined activities described in paragraphs 39 through 42, the first expansion project is a major modification of a major stationary source that resulted in a significant net emissions increase for  $SO_2$ ,  $NO_x$ , PM and CO at the CPI facility. This subjects the first expansion project to Part C of the Act, 40 C.F.R. §52.21 and

the Wisconsin SIP for  $SO_2$ ,  $NO_x$ , PM and CO.

## Pulp Mill Modernization Project

- 45. Starting in or about 1986, CPI commenced a second expansion project ("second expansion project") to increase the overall pulp production capacity of the facility.
- 46. In or about 1988, CPI commenced construction of a four-effect pre-evaporator. In or about 1989, CPI commenced operation of a four-effect pre-evaporator.
- 47. In or about 1989, CPI commenced construction of a two-stage heavy black liquor oxidation ("HBLO") system. In or about 1989, CPI commenced operation of the HBLO system.
- 48. The installation and operation of the four-effect preevaporator and HBLO system allowed the facility to operate at a higher processing rate (in tons of black liquor solid per day), and increased the percentage of black liquor solids that could be fired in the recovery boilers. This allowed the recovery boilers and the entire facility to operate at a higher production rate than previously capable, and at a higher rate than originally designed.
- 49. In or about 1989, CPI made both physical changes to, and changes in the method of operation of, recovery boiler #1 ("R-1") at the facility, which was intended to increase the black liquor solids firing capacity from 1.20 to 1.50 million pounds of black liquor solids per day. Specifically, CPI made the following changes to R-1: (a) converted a two-level air combustion system to a three-level air system; (b) installed additional soot blowers; (c) installed an automatic primary air port cleaner; (d) replaced side wall; (e) replaced the economizer, including the headers and (f) added two staged super heater assemblies. In or about 1990, CPI commenced operation of a modified recovery boiler R-1.
- 50. In or about 1990, CPI made both physical changes to, and changes in the method of operation of, the recovery boiler #2 ("R-2") at the facility, which was intended to increase the black liquor solids firing capacity from 1.20 to 1.50 million pounds of black liquor solids per day. Specifically, CPI made the following changes to R-2: (a) converted the air combustion system from a two-level air system to a three-level air system; (b) installed additional super heater capacity; (c) replaced 14 soot blower tips; (d)

installed five additional soot blowers; and (e) relocated one existing soot blower. In or about 1990, CPI commenced operation of a modified recovery boiler R-2.

- 51. In or about 1990, CPI made both physical changes to, and changes in the method of operation of, the softwood digester K-2 at the facility, which was intended to increase the pulp production capacity from 400 to more than 580 air dry tons of pulp per day. The facility made the following changes to increase production: (a) enlarged the chip bin to provide additional residence time; (b) installed a full diameter bin activator; (c) increased the size of low pressure feeder ("LPF") and high pressure feeder ("HPF"); (d) increased the stemming vessel capacity; and (e) increased the size of the chip meter.
- 52. In or about 1990, CPI commenced construction of a kraft wood room expansion. In or about 1990, CPI commenced operation of the kraft wood room.
- 53. In or about 1990, CPI commenced construction of a 300-ton wet lap machine for the storage of pulp. In or about 1990, CPI commenced operation of a 300-ton wet lap machine for the storage of pulp.
- 54. All of these activities were elements of an integrated project intended to increase the capacity of the facility. Therefore, all of these activities should have been reviewed together to determine whether a significant net emissions increase had occurred for pollutants regulated under the Act and be permitted accordingly.
- 55. As a result of the combined activities described in paragraphs 45 through 53, the second expansion project is a major modification of a major stationary source that resulted in a significant net emissions increase for  $SO_2$ ,  $NO_x$ , PM, CO, TRS and VOC at the CPI facility. This subjects the second expansion project to Part C of the Act, 40 C.F.R. §52.21 and the Wisconsin SIP for  $SO_2$ ,  $NO_x$ , PM, CO, TRS and VOC.

### **Violations**

#### First Expansion Project

56. In violation of Section 165(a)(1) of the Act, 40 C.F.R. \$52.21(i) and the Wisconsin SIP, CPI began construction and operation of the first expansion project prior to obtaining

- a PSD permit in accordance with the Act, 40 C.F.R. §52.21(i) and the Wisconsin SIP.
- 57. In violation of Section 165(a)(4) of the Act, 40 C.F.R. \$52.21(j)(3) and the Wisconsin SIP, CPI has failed to employ BACT for  $\$0_2$  emissions at power boiler \$1 ("P-1") and power boiler \$2 ("P-2") of the facility.
- 58. In violation of 40 C.F.R. \$52.21(k) and the Wisconsin SIP, CPI has failed to conduct a source impact analysis for PM,  $$SO_2$$ ,  $$NO_X$$ , and \$CO\$ at the first expansion project.
- 59. In violation of 40 C.F.R. \$52.21(m) and the Wisconsin SIP, CPI has failed to conduct an ambient air quality analysis for PM,  $SO_2$ ,  $NO_X$ , and CO at the first expansion project.
- 60. In violation of 40 C.F.R. §52.21(n) and the Wisconsin SIP, CPI has failed to submit all information necessary to perform any analysis or make any determination required under 40 C.F.R. §52.21(n) at the first expansion project.
- 61. In violation of 40 C.F.R. §52.21(o) and the Wisconsin SIP, CPI has failed to provide an analysis of the impairment to visibility, soils and vegetation, and of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the first expansion project.

## Second Expansion Project

- 62. In violation of Section 165(a)(1) of the Act, 40 C.F.R. \$52.21(i) and the Wisconsin SIP, CPI began construction and operation of the second expansion project prior to obtaining a PSD permit in accordance with the Act and 40 C.F.R. \$52.21(i), and the Wisconsin SIP.
- 63. In violation of Section 165(a)(4) of the Act, 40 C.F.R. \$52.21(j)(3) and the Wisconsin SIP, CPI has failed to employ BACT for  $\$0_2$  emissions at P-1 and P-2 of the facility.
- 64. In violation of Section 165(a)(4) of the Act, 40 C.F.R. \$52.21(j)(3) and the Wisconsin SIP, CPI has failed to employ BACT for NO<sub>x</sub>, PM, CO, and Total Reduced Sulfur ("TRS") emissions at R-1 and R-2 of the facility.
- 65. In violation of Section 165(a)(4) of the Act, 40 C.F.R. \$52.21(j)(3) and the Wisconsin SIP, CPI has failed to employ BACT for TRS and VOC emissions at the HBLO system of the

facility.

- 66. In violation of 40 C.F.R. §52.21(k) and the Wisconsin SIP, CPI has failed to conduct a source impact analysis for SO<sub>2</sub>,  $NO_x$ , PM, CO, TRS and VOC at the second expansion project.
- 67. In violation of 40 C.F.R. §52.21(m) and the Wisconsin SIP, CPI has failed to conduct an ambient air quality analysis for  $SO_2$ ,  $NO_x$ , PM, CO, TRS and VOC at the second expansion project.
- 68. In violation of 40 C.F.R. §52.21(n) and the Wisconsin SIP, CPI has failed to submit all information necessary to perform any analysis or make any determination required under 40 C.F.R. §52.21(n) for the second expansion project.
- In violation of 40 C.F.R. §52.21(o) and the Wisconsin SIP, 69. CPI has failed to provide an analysis of the impairment to visibility, soils and vegetation, and of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the second expansion project.

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## CERTIFICATE OF MAILING

I, Shanee Rucker, certify that I sent a Notice of Violation, No. EPA-5-00-WI-5, by Certified Mail, Return Receipt Requested, to:

James Weinbauer, Director of Environmental Affairs Consolidated Papers, Kraft Division 950 Fourth Avenue North Wisconsin Rapids, Wisconsin 54495-8050

I also certify that I sent copies of the Notice of Violation by first class mail to:

Lloyd Eagan, Director
Bureau of Air Management
Wisconsin Department of Natural Resources
P. O. Box 7921
101 South Street
Madison, Wisconsin 53707

Tom Woletz
West Central Region
Wisconsin Department of Natural Resources
P. O. Box 4001
1300 West Clairemont
Eau Clair, Wisconsin 54702

Mark A. Thimke Foley & Lardner Firstar Center 777 East Wisconsin Avenue Milwaukee, Wisconsin 53202-5367

on the 21 day of March, 2000.

Manee Rucker, Secretary

AECAS, (MI/WI) (312) 866-6086

CERTIFIED MAIL RECEIPT NUMBER: 2199026 492